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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/014,525	01/28/1998	MICHAEL SASUTA	CM02261H	4610

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RAYMOND J WARREN
MOTOROLA
1303 EAST ALGONQUIN ROAD
SCHAUMBURG, IL 60196

EXAMINER

DUONG, FRANK

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/014,525

Applicant(s)

SASUTA ET AL.

Examiner

Frank Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 13-23 and 32-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12 and 24-29 is/are rejected.
- 7) ☒ Claim(s) 9-11 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This Office Action is a response to the Election dated 07/17/2002. Elected claims 1-12, 24-31 and non-elected claims 13-28, 32-48 are pending in the application. Elected claims 1-12 and 24-31 are examined on the merits. Non-elected claims 13-28 and 32-48 are withdrawn from further consideration. In a response to this Office Action, Applicants are advised to cancel to non-elected claims to expedite the prosecution, should the response place the application in condition for allowance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.

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- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities:

BRIEF SUMMARY OF THE INVENTION, as specified in the above guideline, is required.

Page 11, line 7, "step 82" should read --step 92--.

Page 13, line 16, "their is" should read --there is--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

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published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-8, 12 and 24-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Bakre et al (*M-RPC: A Remote Procedure Call Service for Mobile Clients, Rutgers University, pages 1-13, 1995*) (hereinafter "Bakre").

Regarding **claim 1**, in accordance with Bakre reference entirety, Bakre discloses in a communication system (see Fig. 1 on page 4) that includes a service provider (MSR) and a plurality of subscribers (MHs), a method for processing services (see Fig. 2 on page 6) comprises the steps of:

a) determining whether the service provider is capable of supporting at least one service for one of the plurality of subscribers (*see page 5, section 3.2, left column, Bakre discloses before the client application can make any RPC requests, it has to obtain a client handle from the M-RPC system. In its request for creation of a client handle, the client program can either specify a particular server or it can specify a service name instead. The M-RPC system maps a service name to a service identifier recognized by the M-RPC agent at the MSR. Thus, the handle creating step reads on the claimed limitation set forth*);

b) when the service provider is capable of supporting the at least one service, providing service processing logic to the service provider by the one of *the plurality of subscribers* (*see Fig. 2; the RPC request is delivered to M-RPC agent at MSR*).

c) executing the service processing logic by the service provider to provide the at least one service to the one of the plurality of subscribers based on the service processing

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logic when the at least one service has been requested (see *Fig. 3 and on page 3, section 3.3, Bakre discloses the M-RPC agent is responsible for the execution of the RPC requests submitted by the MHs within its cells. Thus, the recitation thereat reads on the claimed limitation set forth).*

Regarding **claim 2**, in addition to features recited in base claim 1 (see *rationales pertaining the rejection of base claim 1 discussed above*), Bakre further discloses step a) also provides a service registration to the service provider (see *page 5, section 3.2, Bakre also discloses the M-RPC system maps a service name to a service identifier which is recognized by the M-RPC agent at the MSR*).

Regarding **claim 3**, in addition to features recited in base claim 1 (see *rationales pertaining the rejection of base claim 1 discussed above*), Bakre further discloses within step a): receiving an indication of capabilities of the service provider by the one of the plurality of subscribers; and determining whether the service provider is capable of supporting the at least one service base on the indication by the one of the plurality of subscribers (see *page 5, section 3.4, Bakre discloses when binding to a service is requested by an MH application, a service-mapper interface at the MH is consulted to determine if the service is available via the current MSR. The service-mapper returns a service identifier to be used in the binding request which is sent to the M-RPC agent at the MSR at the time of client handle creation. Thus, the recitation thereat reads on the claimed limitations set forth*).

Regarding **claim 4**, in addition to features recited in base claim 1 (see *rationales pertaining the rejection of base claim 1 discussed above*), Bakre further discloses within

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step a): receiving an indication of service requirements of the one of the plurality of subscribers by the service provider; and determining whether the service provider is capable of supporting the at least one service base on the indication by the service provider (see page 5, section 3.4, Bakre discloses the service-mapper returns a service identifier to be used in the binding request which is sent to the M-RPC agent at the MSR at the time of client handle creation. The agent in turn consults its local database to locate an available server which provides the requested service and performs a provisional binding of the client request with that server. Thus, the recitation thereat implicitly and inherently reads on the claimed limitations in a manner set forth).

Regarding **claim 5**, in addition to features recited in base claim 1 (see rationales pertaining the rejection of base claim 1 discussed above), Bakre further discloses within step b):

determining the service provider to be capable when the service provider includes a service application (see page 5, section 3.4, Bakre discloses the agent in turn consults its local database to locate an available server which provides the requested service and performs a provisional binding of the client request with that server); and

providing the service processing logic to include custom user parameters, wherein the custom user parameters modify the service application to meet customization requirements of the one of the plurality of subscribers (see page 5, section 3.2, Bakre also discloses the client side of a distributed application running on a mobile host can make use of client stubs to call remote procedures at a server. These

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client stubs can be generated by a stub generator and perform the task of marshaling and unmarshaling arguments and results respectively. Thus, the arguments are inherently corresponding to "custom user parameters" and the task of marshaling and unmarshaling arguments is corresponding to "the custom user parameters modify the service application to meet customization requirements" of a mobile host).

Regarding **claim 6**, in addition to features recited in base claim 1 (see *rationales pertaining the rejection of base claim 1 discussed above*), Bakre further discloses within step b):

determining the service provider to be capable when the service provider has sufficient processing and memory (*inherent; because on page 5, section 3.3, Bakre discloses once the RPC request is reliably delivered to the M-RPC agent by the M-RPC system on the MH, the agent takes over the retransmission of failed requests. Thus, in order for the M-RPC agent at the MSR to take over the retransmission of the failed requests, MSR must have sufficient processing and memory*); and

providing the service processing logic to include a service application and custom user parameters that relate to the at least one service (see *page 5, section 3.2, Bakre also discloses the client side of a distributed application running on a mobile host can make use of client stubs to call remote procedures at a server. These client stubs can be generated by a stub generator and perform the task of marshaling and unmarshaling arguments and results respectively. Thus, the arguments are inherently corresponding to "custom user parameters" related to service that is RPC'ed at a server*).

Regarding **claim 7**, in addition to features recited in base claim 6 (*see rationales pertaining the rejection of base claim 6 discussed above*), Bakre further discloses queuing the at least one service when at least one of: the service provider has insufficient processing and memory and the communication system has insufficient communication resources (*see page 6, section. 3.6, Bakre discloses if the MH disconnects after submitting an RPC request to the M-RPC agent at the MSR, the agent can collect and store the result until the MH reconnects. Thus, the disconnection is implicitly and inherently corresponding to "communication system has insufficient communication resources"*).

Regarding **claim 8**, in addition to features recited in base claim 1 (*see rationales pertaining the rejection of base claim 1 discussed above*), Bakre further discloses deleting the service processing logic by the service provider based on timeout (*see page 7, continuation of section 3.6, Bakre discloses applications can specify a handler to be used for disconnected operation which may either provide graceful recovery from such a condition which would normally cause a **timeout** in the conventional RPC systems or may be a substitute for the remote procedure*).

Regarding **claim 12**, in addition to features recited in base claim 1 (*see rationales pertaining the rejection of base claim 1 discussed above*), Bakre further discloses determining that the service provider is capable of supporting the at least one service when the service provider has been authenticated by the one of the plurality of subscribers (*see page 11, section 5, Bakre discloses the M-RPC agent in our system is*

a trusted representative of the mobile client and is authorized to make RPC request and collect results on it behalf).

Regarding **claim 24**, in accordance with Bakre reference entirety, Bakre discloses in a communication system (see Fig. 1 on page 4) that includes a service provider (MSR) and a plurality of subscribers (MHs), a method for processing services (see Fig. 2 on page 6) comprises the steps of:

- a) participating in a determination as to whether the service provider is capable of supporting at least one service for one of the plurality of subscribers (see page 5, section 3.2, left column, Bakre discloses before the client application can make any RPC requests, it has to obtain a client handle from the M-RPC system. In its request for creation of a client handle, the client program can either specify a particular server or it can specify a service name instead. The M-RPC system maps a service name to a service identifier recognized by the M-RPC agent at the MSR. Thus, the handle creating step reads on the claimed limitation set forth);
- b) when the service provider is capable, receiving service processing logic (see Fig. 2; the RPC request is delivered to M-RPC agent at MSR).
- c) executing the service processing logic to provide the at least one service to the one of the plurality of subscribers based on the service processing logic when the at least one of the plurality of subscribers requests the at least one service (see Fig. 3 and on page 3, section 3.3, Bakre discloses the M-RPC agent is responsible for the execution of the RPC requests submitted by the MHs within its cells. Thus, the recitation thereat reads on the claimed limitation set forth).

Regarding **claim 25**, in addition to features recited in base claim 24 (see *rationales pertaining the rejection of base claim 24 discussed above*), Bakre further discloses within step a): providing an indication of capabilities of the service provider to one of the plurality of subscribers (see page 5, section 3.4, Bakre discloses when binding to a service is requested by an MH application, a service-mapper interface at the MH is consulted to determine if the service is available via the current MSR. The service-mapper returns a service identifier to be used in the binding request which is sent to the M-RPC agent at the MSR at the time of client handle creation. Thus, the recitation thereat reads on the claimed limitations set forth).

Regarding **claim 26**, in addition to features recited in base claim 24 (see *rationales pertaining the rejection of base claim 24 discussed above*), Bakre further discloses within step a): receiving an indication of service requirements of the one of the plurality of subscribers; and determining whether the service provider is capable of supporting the at least one service base on the indication (see page 5, section 3.4, Bakre discloses the service-mapper returns a service identifier to be used in the binding request which is sent to the M-RPC agent at the MSR at the time of client handle creation. The agent in turn consults its local database to locate an available server which provides the requested service and performs a provisional binding of the client request with that server. Thus, the recitation thereat implicitly and inherently reads on the claimed limitations in a manner set forth).

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Regarding **claim 27**, in addition to features recited in base claim 24 (see *rationales pertaining the rejection of base claim 24 discussed above*), Bakre further discloses within step b):

determining the service provider to be capable when the service provider includes a service application (see page 5, section 3.4, Bakre discloses the agent in turn consults its local database to locate an available server which provides the requested service and performs a provisional binding of the client request with that server); and

receiving the service processing logic to include custom user parameters, wherein the custom user parameters modify the service application to meet customization requirements of the one of the plurality of subscribers (see page 5, section 3.2, Bakre also discloses the client side of a distributed application running on a mobile host can make use of client stubs to call remote procedures at a server. These client stubs can be generated by a stub generator and perform the task of marshaling and unmarshaling arguments and results respectively. Thus, the arguments are inherently corresponding to "custom user parameters" and the task of marshaling and unmarshaling arguments is corresponding to "the custom user parameters modify the service application to meet customization requirements" of a mobile host).

Regarding **claim 28**, in addition to features recited in base claim 24 (see *rationales pertaining the rejection of base claim 24 discussed above*), Bakre further discloses within step b):

determining the service provider to be capable when the service provider has sufficient processing and memory (*inherent; because on page 5, section 3.3, Bakre discloses once the RPC request is reliably delivered to the M-RPC agent by the M-RPC system on the MH, the agent takes over the retransmission of failed requests. Thus, in order for the M-RPC agent at the MSR to take over the retransmission of the failed requests, MSR must have sufficient processing and memory*); and

receiving the service processing logic to include a service application and custom user parameters that relate to the at least one service (see page 5, section 3.2, Bakre also discloses the client side of a distributed application running on a mobile host can make use of client stubs to call remote procedures at a server. These client stubs can be generated by a stub generator and perform the task of marshaling and unmarshaling arguments and results respectively. Thus, the arguments are inherently corresponding to "custom user parameters" related to service that is RPC'ed at a server).

Regarding **claim 29**, in addition to features recited in base claim 28 (see rationales pertaining the rejection of base claim 28 discussed above), Bakre further discloses queuing the at least one service when at least one of: the service provider has insufficient processing and memory and the communication system has insufficient communication resources (see page 6, section. 3.6, Bakre discloses if the MH disconnects after submitting an RPC request to the M-RPC agent at the MSR, the agent can collect and store the result until the MH reconnects. Thus, the disconnection is implicitly and inherently corresponding to "communication system has insufficient communication resources").

Regarding **claim 30**, in addition to features recited in base claim 24 (see *rationales pertaining the rejection of base claim 24 discussed above*), Bakre further discloses deleting the service processing logic by the service provider based on timeout (see page 7, continuation of section 3.6, Bakre discloses applications can specify a handler to be used for disconnected operation which may either provide graceful recovery from such a condition which would normally cause a **timeout** in the conventional RPC systems or may be a substitute for the remote procedure).

Allowable Subject Matter

4. Claims 9-11 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record (Bakre reference), considered individually or in combination, fails to fairly show or suggest the claimed method of base claims 1 or 24 and further limits with inventive steps of "*receiving a command from a subscriber; and disabling the service processing logic in response to the command when the subscriber is authorized to command disablement of the service processing*" that are functionally interconnected with other steps in a manner set forth as claimed in the dependent claims 9 and 31.

Dependent claims 10-11 further limit the indicated allowable base claim 9.

Response to Arguments

6. Applicant's arguments filed 07/17/2002 have been fully considered but they are not persuasive.

In the Remarks of the Response to Restriction Requirement filed 07/17/2002, the Applicants assert that "*all claims present in ... should be examined together*".

In response, Examiner respectfully disagrees and asserts the restriction is proper for the reasons provided in the last Office Action. Even though the inventions of Groups I and II are classified in the same classes and subclasses (370/401), the claimed inventions in Group I and II are distinct from each other as clearly set forth in the last Office Action.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Want et al (USP 5,564,070).

Theimer et al (USP 5,603,054).

Chase, Jr. (USP 5,974,238).

Hodes et al, Composable Ad-Hoc Mobile Services for Universal Interaction, University of California at Berkeley, pages 1-12, August 2, 1997.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (703) 308-5428. The examiner can normally be reached on 7:00AM-3:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Frank Duong
October 16, 2002

Seema S. Rao
SPE AU 2666
10/17/02